#### PROJECT NOTE

TO: Project File

SUBJECT: Jard Company, Inc.

TASK DESCRIPTION: Excavated Material Pile Size Determination and Documentation

TDD NO.: 13-09-0001

W.O. NO.: 20114-081-998-0863

TASK NO.: 60

DATE: 25 September 2013

PREPARED BY: Gerald Hornok

Presented below is documentation regarding the size of the excavated material pile and the origin of the material contained within the pile.

# Attachment A:

Email correspondence between Vermont Department of Environmental Conservation (VT DEC) member Trish Coppolino, Milone & MacBroom, Inc. Water Resource Scientist and Engineer Roy Schiff, and Weston Solutions, Inc. Superfund Technical Assessment and Response Team III (START) member Gerald Hornok indicated that during river restoration work, excavation of materials on the southern portion of the Jard property took place. Schiff indicated that two phases of excavation were conducted with 15,700 cubic yards (yd³) and 19,300 yd³ excavated in each of the phases. This amounts to a total of 35,000 yd³ of material excavated. Schiff also indicated that over 95% of the excavation for the two phases occurred on the Jard parcel. Therefore 95% of 35,000 yd³ is 33,250 yd³.

### **Attachment B**:

This attachment contains the Global Positioning System (GPS) data collected during the 20 November 2012 site reconnaissance conducted by EPA, VT DEC, and START personnel. The larger polygon shape indicates the base of the pile material from the level ground surface. The smaller polygon indicates the top of the pile slope constituting edge of the top surface. The base polygon is approximately 69,648 square feet (ft²) with the top surface polygon 32,903 ft² in area. GPS documentation also indicated an average height of 20 feet for the pile. The highest point of the pile is located along the northern slope. Therefore, the average surface area of the pile is 51,275 ft² and an average height of 20 ft for the pile. This provides a volume of 1,025,500 cubic feet (ft³) which is equivalent to 37,981 yd³.

# Attachment A

From: Roy Schiff

To: Hornok, Gerald; Coppolino, Patricia

dmonks@bennington.com; Kelly, John F.; Cahoon, Barry

Subject: RE: roaring branch

Date: Monday, November 26, 2012 4:28:51 PM

All of material excavated on the Jard parcel stayed on the Jard parcel since the stockpile is on the Jard parcel. I would estimate that over 95% of the excavation for phases 1 and 2 occurred on the Jard parcel. A small amount of material from the parcel closer to the Park street Bridge is on the bottom of the pile, and then the pile was formed with the excavated bermed material on the Jard site moving upstream. The second phase of work ended a little upstream of the Jard parcel line so a small amount of non-Jard material may be on the top of the stockpile. It should be noted that the majority of the excavation occurred closer to the river than the capped site.

#### Roy Schiff, PhD, PE

Water Resource Scientist and Engineer



1 South Main Street, 2nd Floor / Waterbury, Vermont 05676 802.882.8335 / 802.882.8346 (Fax) www.miloneandmacbroom.com



Please consider the environment before printing this e-mail.

**From:** Hornok, Gerald [mailto:Gerald.Hornok@WestonSolutions.com]

Sent: Monday, November 26, 2012 2:06 PM

To: Roy Schiff; Coppolino, Patricia

Cc: dmonks@bennington.com; Kelly, John F.

Subject: RE: roaring branch

Do these volumes constitute the amount of material removed from the Jard property only? Does the constructed pile contain a mix of materials from the Jard property and off-site? We are looking for an estimate of material which was removed from the Jard property during the construction project and moved to the pile next door. Also, if the pile constitutes a mix of materials, is there any information as to 'where' in the pile the Jard material was placed (ie. Bottom, along the northern edge, encased in the middle, etc)?

**From:** Roy Schiff [mailto:roys@miloneandmacbroom.com]

Sent: Monday, November 26, 2012 1:36 PM

To: Coppolino, Patricia

Cc: <a href="mailto:dmonks@bennington.com">dmonks@bennington.com</a>; Hornok, Gerald; Kelly, John F.

Subject: RE: roaring branch

Trish.

Two phases of work were completed pre-Irene. The first took place in June-July 2010 and 15,700 cubic yards of fill along the river were excavated. Some material was used to form a new berm on the back of the floodplain adjacent to the Jard Site, while some went to the stockpile site between the state garage and Jard site.

The second phase of work took place in July-September 2010 and 19,300 cubic yards were moved. Note that some of this volume was rock that was reused to armor the new berm during the project.

Roy

#### Roy Schiff, PhD, PE

Water Resource Scientist and Engineer



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From: Coppolino, Patricia [mailto:Patricia.Coppolino@state.vt.us]

Sent: Tuesday, November 20, 2012 9:03 PM

To: Roy Schiff

Cc: dmonks@bennington.com; Hornok, Gerald; Kelly, John F.

Subject: RE: roaring branch

Hi Roy and Dan - could one of you potentially give me an estimate of the volume of soil that was removed during the first flood plain restoration (before Irene) that was stockpiled next to the cap at the JARD site.

Also, Dan do you have any photos of the cap when the levy was breached from Roaring Branch Flooding due to TSI?

Thanks -Trish

**From:** Roy Schiff [roys@miloneandmacbroom.com] Sent: Wednesday, September 01, 2010 9:32 AM

To: Coppolino, Patricia; Cahoon, Barry

Cc: dmonks@bennington.com; Desch, George; Brian Cote; shurd@bennington.com; Kline, Mike

Subject: RE: roaring branch

The water line was rusted out and dry. The contractor removed it with the fill when digging the trench for the armor key.

Roy

Roy Schiff, PhD, PE

Water Resource Scientist and Engineer

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Please consider the environment before printing this e-mail.

From: Coppolino, Patricia [mailto:Patricia.Coppolino@state.vt.us]

**Sent:** Tue 8/31/2010 11:59 AM **To:** Roy Schiff; Cahoon, Barry

Cc: dmonks@bennington.com; Desch, George; Brian Cote; shurd@bennington.com; Kline, Mike

Subject: RE: roaring branch

### Hi Roy (and everyone else),

I wanted to bring this to your attention as it was just brought to ours. There is a water line that runs under the JARD property to the Veteran's Home. The easement on our site cap drawing (attached) shows the line running from the southeast towards Park Street. An old engineering drawing we have says the line runs along the berms. I don't know what the depth of this line is or if it is still active (I'm trying to determine that last part). I do know that the line is 6" and apparently has a lot of water pressure associated with it (old maps state 125 lbs per sq. inch!!)

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# Attachment B



Figure 1

## Pile Base and Top Area

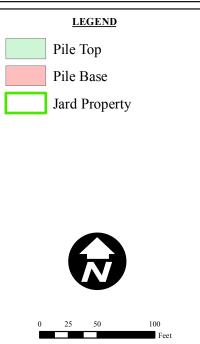
Jard Company, Inc. 259 Bowen Road Bennington, Vermont

EPA Region I Superfund Technical Assessment and Response Team (START) III Contract No. EP-W-05-042

TDD Number: 12-10-0008 Created by: G. Hornok

Created on: 11 September 2012

Modified by: Modified on:



#### Data Sources:

Imagery: Bing

Topos: Not Applicable All other data: START



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